INDEX OF DECUS PROCEEDINGS

1969

THIRD CANADIAN SYMPOSIUM

Revolutions in the Newspaper Industry By W. Haydn Morris

A Real Time System for Particle Identification By R. J. Kidney and C. A. Miller

Collecting Vector Electrocardiograms Using a Small Computer By Henry O'Beirne and R. S. Fowler

Automated Objective Hearing Tests Using the LINC-8 By R. Funnell, R. P. Gannon and C. A. Laszlo

A PDP-9 System for Spike Detection and Analysis of Multiple Unit Recordings By J. F. Feldman

A PDP-9 SPECIALIZED MONITOR FOR DATA ACQUISITION AND HANDLING By J. F. Feldman

Data Acquisition Systems for Meterology and Heat Transfer By E. E. Wuschke

A Computer Controlled Laboratory for Visual Perception and Human Learning By S. W. Link

A 4K Navigation Officer? By David A. Dalby

The PDP-8/S In An Educational Evironment By J. Davidson

Using the PDP-8 At the Technical Institute Level By G. Love, A. Harms and A. Robbins

A Limited Multi-Terminal System for CAI By David A. Ensor

Computer Controlled Audio Selection By A. R. Osborne

Write Protect Facility for the PDP-8/S By P. A. V. Thomas

Automatic Priority Interrupt for a PDP-8 By R. T. Millar

Use of a Small Computer to Control A Digital Plotter By R. J. Martin

Computer Simulation of Digital Machines By William R. Bezanson

Synchronous Communication Interface for the PDP-10 By Norman Housley

SPRING 1969 DECUS SYMPOSIUM

Computer Controlled Transmission Measurements By W. H. Knight

Interactive Data Display Techniques With a Color CRT Display By Hiram T. French and Lee B. Metrick

FOCAL Graphics By Richard Merrill

DISP - A Program to Provide 34D Display Capability in FORTRAN-D By Stephen G. Wellcor

A Graphical Interactive Systems for the CRT Input-Output of Chemical Structures By Andre M. Gagnoud

SPRING 1969 DECUS SYMPOSIUM (Continued)

The PDP-9 As a Digital Processor In a Hybrid System By Christopher L. Cross, Jon C. Strauss and Thomas A. Fyfe

Multiplexing Without Tears By Caxton C. Foster

A Centralized Data Acquisition and Time-Sharing Message Switching System By J. W. Fryklund

Computer Assisted Instruction Using a PDP-8/L By K. Fauser and P. Wilcox

The Computer in Secondary School Social Studies By Donald C. Holznagel

Computer Education of Secondary School Teachers By Theodore R. Blakeslee and Ann G. Duffy

The Computer in the High School Physics Laboratory By Clifford C. Little

Incorporation of Computer Techniques in a Basic Course of Engineering Mechanics By Dr. A. Feingold

Remote Access Computer Output Over ITV System By Major R. L. Leech and Captain S. B. Fischer

The Peripheral Control Processor Anti-Timesharing for Small Computers By John C. Alderman, Jr.

An Implementation of SNOBOL-3 On a PDP-8/S By Mark Feathers

TALC - An Improved Linear Calculator By Bruce J. Taylor

Techniques for Compiling Large Fortran Programs for a PDP-9 Computer By Donald R. Donati and Suresh C. Mathur

JOANIE - A Multianalyzer Program for Pulse Height Analysis By Richard Hully

Use of a PDP-9 Computer In Nuclear Spectroscopy Measurements By M. Giannini and A. Aquili

A Simple Program for Pulse-Height Analysis With Time-Sharing for Routines Using the Peripheral Units By Birthe Olsen

Control and Monitoring of the SLAC Accelerator Utilizing a PDP-9 System By Warren C. Struven

On-Line High Energy Physics Analysis With a PDP-9 By P. Shrager, G. Snape and L. Teitelbaum

An Output Program Used with On-Line Data Collection By M. H. Foss and R. H. Bicker

SLAC Spiral Reader System By Michael J. C. Hu

SCOLDS - Spark Chamber On-Line Data System By Ray Jones and Clarence A. Tilger

An Electronic Counter to PDP-8/I Interface By M. Petrinovic and O. Cooper

Optimum Information Recovery From Bandlimited Data By C. N. Kelly, W. H. Frawley and E. O. Brigham

SPRING 1969 DECUS SYMPOSIUM (Continued)

A Spectral Analysis Program for the Processing of Neuro-Electric Data By Francesca Urbano, Stephen G. Pauker and Frank E. Ervin, M.D.

A Disc-Based Operating System for Mass Spectrometry Experiments By Roger E. Frye, Barbara G. Slaughter and Donald E. Fraipont

Foreground/Background/8 By John C. Alderman, Jr.

Magtape FOCAL By John C. Alderman, Jr.

A Computer Controlled Isotope Ratio Mass Spectrometer Using Dry Reed Relays By Leslie C. Nelson, Jr., and Ralph J. Hemmer

A New Approach To On-Line, Run-Time Program Logic and Error Debugging Using Hardware Implementation By Robert S. Enabnit

SERF - Serial File Handler By Michael P. McCarthy and Jim D. Melton

PDP-9 $\rightleftarrows$ 1004 By A. R. Osborne and R. S. McLean

Analog-To-Digital Conversion Subroutines Developed on the PDP-7 Under the 9-To-7 Retrofit of the Advanced Software System By Francis W. Keller, John W. Cox and Daniel A. Brody

Plotter and Display Routines Developed on the PDP-7 Under 9-To-7 Retrofit of the Advanced Software System By John W. Cox, Francis W. Keller, Melvin D. Woolsey and Daniel A. Brody

The Interaction of Programs In a Syntax Directed Image Processing System for the PDP-10 By Richard Feldmann and Sam D. Bryan

Performance of the DEC PDP-10 FORTRAN Subroutine Library By J. M. Bennett

PDP-10 COBOL By Al Blackington

On-Line Computer Control of a Medical Multitest System By Harold Levy

Analysis of Multiple Medical Signals Using a Small Computer By Maxine L. Paulsen, Roger Simmons, M.D. and Caesar A. Caceres

Partial and Impartial Race Games for the Study of Human Problem Solving By Alick Elithorn and Alex Telford

WHAT - Another Simulation Language? By Fred R. Sias, Jr. and Thomas G. Coleman

Computer Controlled Dynamic Cineradiography By O. Fujimura, H. Ishida and S. Kiritani

A Multi-Purpose Logic Module for Behavioral Experiments By Arthur G. Snapper and Julius Z. Knapp

On the Varieties of Computer Experience By Steven J. Stadler

Can a Small Dedicated Machine Find Happiness In a Company That Pioneered Time-Sharing By Joseph Markowitz

Early Experience With the LINC-8 In a High Volume Clinical Chemistry Laboratory By John A. Lott, Ph.D., H. D. Gruemer, M.D., and Jacqueline A. Scott, B. S.

Clinical Chemistry Automation Using a PDP-8/L By S. A. Sondov

A System for Verifying the Reliability of Hospital Laboratory Data By S. A. Goldblatt M.D.

SPRING 1969 DECUS SYMPOSIUM (Continued)

Quality Control In the Hematology Laboratory Using Blood Indices By Thomas Slater and S. A. Goldblatt, M.D.

Fluid and Electrolyte Balance - Programs for Diagnosis and Corrective Therapy By S. A. Goldblatt, M.D. and Jeanne Boyer, M.T.

Clinical Laboratory Administration Using a PDP-8/L By W. H. Eldridge, S. R. Trost, and B. S. Langer

A New System for Source Document Data Processing - Developed in the Laboratory, Now Hospital-Wide By Thomas C. Hartney, M.D.

Interface for the Technicon SMA 12/60 Autoanalyzer With the LINC-8 LABCOM System By John L. Smith and Benjamin T. Williams

Automatic Monitoring of Postoperative Patients By F. John Lewis, M.D., Steven Deller, B. S., Michael Quinn, Martin Kite, M.S. and John E. Jacobs, Ph.D.

The Satellite Computer In Patient Monitoring By Gerald A. Masek, Ph.D., and David L. Roseman, M.D.

Monitoring of Clinical Data By Means of a Large Digital Computer By Howard K. Thompson, Jr., M.D., and Max A. Woodbury, Ph.D.

Real-Time Cardiac Arrhythmia Monitoring With the PDP-7 By C. L. Feldman, M. Hubelbank and P. G. Amazeen

FALL 1969 DECUS SYMPOSIUM

Interactive Graphical Generation of Finite Element Analysis Input Data By C. R. Carman and R. J. Pick

Computer Graphics and an Interactive Procedure for Network Function Synthesis By Richard K. McAllister

Integrated Real-Time Graphic Display System By D. R. Friedrichs and B. R. Smith

On-Line Interactive Inventory Control By Jules Lipow and Nancy Lambert Lipp

Techniques of Program Preparation for Small Computers By C. W. Richardson and E. W. Killian

An Interactive Graphics Facility Under the PDP-10/50 Timesharing Monitor By Harry R. Lewis

A Small Computer Used for Monitoring the Operation of a Large Solar Simulator By Roy McIntosh, Jr.

A Small Computer System for Logging and Manipulating Data From a Spectrometer Flown On a Planetary Probe By Robert E. McCullough

Interactive Editing of Radio Astronomy Data By Jon A. Meads

FALL 1969 DECUS SYMPOSIUM (Continued)

Using Small Digital Computers for Engineering Education By Dr. James C. Bowers

A Hybrid Magnetic Tape Transport As An Audio-Response Unit By Haruhisa Ishida

The Role of Hybrid Computers in Engineering Education By Prof. F. J. Ricci

Simulation As An Educational Tool By Ludwig Braun and Marion Visich, Jr.

An Interactive Signal Processing System By Charles L. Feldman, Francesca Wright, Geofrey Modest, and Frank R. Ervin

Light Pen for Doodling on the LINC-8 Scope By Karl Lowy and John R. Bartlett

The Presentation of Naval Tactical Scenarios on the LINC-8 By Dr. Robert A. Fleming

A Foreground/Background and Control System Using the PDP-8/I Computer in Psychopharmacological Research By Timothy O. T. Ts'o, Russell L. Stewart, Frank J. Karle

Automatic Data Processing on a Mini-Computer By D. Eugene Hokanson and Daniel Parrish

A Control System of a Speech Synthesizer (JAWORD) By LINC-8 By Kazuo Ochiai and Robert Krones

Applications of a LAB-8 Computer System to Behavioral Toxicology Research By Barry L. Johnson and Charlie Xintaras

An Automated Method for the Kinetic Characterization of Enzymes By S. L. Cooke, Jr. and G. N. Salaita

Boundary Layer Wind Tunnel Data Handling By Dr. D. J. Fader and N. Isyrimov

SNOBOL-10 SNOBOL4 for the PDP-10 By Larry Wade

Non-Standard Monitor Features at Stanford By Andy Moorer

Conversational System Performance and Measurement By Tom Hastings, David Plummer, Ronald M. Rutledge and Albin L. Vareha

An Extension to CCL (Concise Command Language) By Richard J. Feldmann

Computer Aided Design for M.O.S. Circuits By J. J. Kubinec

Gamma-Ray Spectrum Analysis Package for a PDP-9 By Ric C. Davies

A Program for Acquiring and Analyzing Gamma Ray Spectra for Use in Conjunction with the PDP-9 Background-Foreground Monitor By C. J. Thompson

Some Experiences with Pulse Height Analysis Using a Disk By David W. Jenson

An On-Line Reactor Fuel Assay System Using the PDP-8 By R. Perry, W. Lord, N. Beyer, and R. Brandenburg

An FFT For PDP-8/I Signal Processing By J. N. Lawson, R. N. Lawson and F. N. Eddy

Efficient Use of Personnel with a Computer By Victor L. Rosenberg

Foreground/Background/8 Now By John C. Alderman, Jr.

A Disk Simulator Using a Single Industry Standard Magnetic Tape Unit By David D. Custer

FALL 1969 DECUS SYMPOSIUM (Continued)

PAL, FORTRAN or FOCAL for Data Acquisition By E. E. Wuschke and F. McGovern

Universal I/O Handler for FOCAL By John C. Alderman, Jr.

SODT: A Scope Octal Debugging Tape for Family-8 Computers By R. I Bystroff and Roger E. Anderson

An Inexpensive High Speed PDP-8 Data Break Interface By Robert L. Swearingen

DDI: Digital Device Interface By Carl D. Lowenstein and Martin D. Benson

A Time-Sharing System for the PDP-9 By David A. Ensor

Program Description of the Ones Complement Arithmetic Operations and Macro Language for PDP-9 Computer By R. F. Wells

Background-Foreground Operation in an Automated Design Facility By Harry M. Taxin

Improved PDP-9/15 FORTRAN Executive Analysis By W. A. DeSimone and James R. Bell

HYMAC, A Hybrid Computing Macro-Assembler By Lawrence H. Gerhardstein

Upgrading Case Historical Data With Computer Assited Reporting By Gilbert Honingfeld Ph.D.

Use of a Small Computer for Reporting Medical Examinations By Joseph M. Edelman, M.D. and Thomas B. Flynn M.D.

A Time-Sharing Operating System for Clinical Data Processing By R. S. Langer

On-Line Data Acquisition From Automated Instruments By Steven A. Sondov

Programs and Tables for Processing and Reporting Clinical Laboratory Tests By W. H. Eldridge

Clinical Data Structures By S. R. Mateosian

A Modular Approach to an Intensive Care Patient Monitoring System By Avram-Chaiyim Miller, Jerome A. G. Russell, Peter R. Harris, and Paul G. Hugenholtz

Computer Analysis of the ECG Data Using Decision Tables Techniques By Josef Wartak and John A. Milliken

CLACH-Data System for a Clinical Laboratory By Lief Olsen

A Real-Time System to Collect and Analyze Data of Ambulation With a Prosthetic Leg By John Allen Jones

A Computer Controlled and Generated Multi-Dimensional Display Device for the Investigation and Modeling of Physiological Systems By John A. Harris and Richard DeJohn

An Application of Algebraic Coding Theory to Information Retrieval By Mark S. Arisohn

A Compression and Real-Time Movie Playback Scheme for the DEC-338 Computer By Noel Bernstein

FIFTH EUROPEAN SEMINAR

A Simple Time-Sharing System for Speech Perception Experiments By W. A. Ainsworth and J. B. Millar

The Alfacode Programming Language for PDP-8 Computers By Torbjorn Alm

Anwendung Einer PDP-8 In Der Nuklearmedizin (Usage of a PDP-8 In Nuclear Medicine) By W. Ammann and J. Doll

Radiation Treatment Planning Using a PDP-8/I By R. E. Bently, J. Milan, and D. Cope

Application of the PDP-8/5 and Digital Stepping Recorder and Digital Display for Automatic Magnetic Field Measurement By L. J. Besse

A PDP-9 Computer Program for On-Line Calculation of Mean Values, Variances and Amplitude Distributions By Ake Bliselius

LINC-8: The Sophisticated Tachistoscope By Geoff Cumming

On Line Computing In a Nuclear Structure Laboratory By G. I. Crawford

On-Line Processing of Vector Cardiograms by PDP-9 By J. S. Duisterhout, J. H. v. Bemmel, G. van Herpen, B. Versteeg, S. J. Hengeveld and L. G. Bierwolf

A Simple Message-Handling System for Telexnetwork on a PDP-8 By Ir.Th.den Dunnen

The Teaching - 8 By John Elder

Messdatenverarbeitung In Der Automobil-Sicherheitsforschung (Measured Data Analysis In Automobile Safety Research) By Dipl. - Ing. J. Elsholz

Impedance Plethysmography and Cardiac Output By E. J. Flanagan

Der Einsatz Einer PDP-8/S Als On-Line-Reachner In Der Szintigraphie (The Addition of a PDP-8/S As An On-Line Computer In the Szintigraphie) By A. Habermehl, P. Eisenhauer and E. H. Graul

Instruction and Data Mode Program Testing a Debug and Trace Suite for PDP-8 with Extended Memory By J. W. Hall

The Design and Philosophy of a Crystallographic Data Collection System By A. C. Harris

Oxford Pepr Production System By J. F. Harris

Use of the LINC-8 Backing Store to Provide Editing, Fast Compilation, and Extended Facilities for FORTRAN Programs By G. R. Hervey

An Interrupt Handler with Masking for the PDP-8 By P. F. Jones

Real Time Data Acquisition and Monitoring Using the PDP-9 Keyboard Monitor System By R. H. Jones

Scissoring a Network for the 340 Display By A. C. Kilgour

The Use of a Coupled PDP-9/360 System for Computer-Aided Design By P. T. Kirstein, A. R. Duncan, I. H. Gould, F. Huber, D. Lalla, N. P. Lynch, P. Rakity, A. K. Rothstein and J. Shane

Operator Guide - Plate Rolling By Birger Kvaavik and Per Ola Sahlin

PDP-8/S - 1905E Link By G. Langholz

MATROP, A Package of Matrix Subroutines By A. Van Lunteren

FIFTH EUROPEAN SEMINAR (Continued)

PDP-8/S 3 Input Universal Logic Modules Simulator By E. H. Mamdani

Service and the User By Vince Marshall

A Program for Simultaeous Simulation and Data Handling in Neurophysiological Research By J. Michaux and J. Bergmans

Pictures Input with a T.V. Camera By Thierry Monnerot

Datasystem For a Clinical Laboratory Based on the Autochemist By Leif Olsen

A Data Logging System Utilising A PDP-8/S Computer By Dr. M. L. Poole

Fast Data Acquisition and Pre-Elaboration System For Nuclear Dynamic Experiments With a Sodium Loop By Paolo Prudente

Real Time Analysis of Fatigue Data By A. Reid

An On-Line 64K Kicksorting Program for an 8K PDP-9 By Ph.B. Smith and P. J. M. Smulders

Hardware and Software for an On-Line PDP-9 Input System for Vector Cardiograms B. Versteeg, L. G. Bierwolf, J. H. v. Bemmel, and J. S. Duisterhout

Use of a PDP-9 for Processing Digitised Cartographic Data By D. W. Vicars

Simplex Solution for Cost Minimisation on the PDP-8 By Roger Willis

Predictive Monitoring with the LINC-8 By C. C. Wilton-Davies

Data Acquisition and Control of a Radioastronomical Spectrograph Using a LINC-8 By Anders Winnberg